domestic one, which also denoted COBAS test to be a less costly and more effective / dominant measure. In addition, sensitivity analysis showed the result was not sensitive to main indicators, including test price, week-4 and week-12 treatment response rate, week-4 and week-12 false negative rate of domestic test, SVR rate of 24-week treatment for cEVR, and proportion of non-EVR in RNA positive in 12th week. **CONCLUSIONS:** Compared with domestic HCV RNA test, for the short term treatment course, COBAS test can identify RVR & EVR more accurately, make more appropriate decisions of course period and have more patients achieve SVR. And in long term perspective, COBAS test plus appropriate course of treatment can prolong patient's life year, improve patient's life quality as well as decrease total medical expense due to less disease progress.

GASTROINTESTINAL DISORDERS – Health Care Use & Policy Studies

PGI6
DRUG UTILIZATION REVIEW OF ACID SUPPRESSANTS (DURABLE) – AN AUDIT TO ASSESS THE UTILIZATION OF PROTON PUMP INHIBITORS AND HISTAMINE H2-RECEPTOR ANTAGONISTS IN CANADIAN HOSPITALS

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OBJECTIVES: Inappropriate utilization of proton pump inhibitors (PPI) and H_2-receptor antagonists (H_2RA) in inpatients is prevalent, but poorly defined. We undertook a rigorous national audit to allow the standardization of grading system for appropriate use. **METHODS:** Medical and demographic data were collected for all in-patients receiving a PPI or H2RA.Regimens reviewed included intravenous bolus PPI or H2RA (IVb), intravenous high dose continuous infusion PPI or H2RA (IVci = bolus followed by ci), and oral PPI or H2RA (PO); and were categorized as Endorsed or Not Endorsed [N-E]. Multivariate modeling was performed to assess predictors of E and N-E use. **RESULTS:** Over 6 months, 1720 patients (age: 64.0±16.7 y, 43% women) receiving 2890 drug regimens were included from 21 Canadian institutions. 28% were taking a PPI and 7% an H2RA before admission. 95% of in-hospital drug regimens used a PPI and only 5% a H2RA. 32% of drug regimens were endorsed. Proportions for E and N-E uses were 28.0 [25.5,30.7] and 72.0 [69.3-74.5], 18.2 [15.1-21.7] and 81.8 [78.3-84.9], and 42.9 [40.0, 45.8] and 57.1 [52.2, 60.0] for IVb, IVci, and PO respectively. The most common indication was upper GI bleeding (70% of IVci, 79% N-E; 18% of IVb, 69% N-E; 25% of PO regimens, 77% N-E). Stress ulcer prophylaxis was the prescribing indication in 8% of IVb (94% N-E), and 6% of oral (88% N-E). Independent predictors of E were suspicion of UGIB (for IVci and PO regimens), time of drug administration (for IVci and IVb), and sex (for IVci). **CONCLUSIONS:** Existing consensus recommendations provided no guidance as to appropriateness of use in up to 40% of regimens. Endorsed use was noted in only 28% of IVb, 18% of IVci, and 43% of PO regimens. These data will help guide future guideline recommendations to optimize in-hospital prescribing of acid suppressants.

INDIVIDUAL'S HEALTH – Clinical Outcomes Studies

PIH1
ADVERSE DRUG EVENTS: HOW INFORMATION TECHNOLOGY WILL MEET THE CHALLENGES OF PHARMACOVIGILANCE

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OBJECTIVES: Polypharmacy has been associated with functional decline and adverse outcomes in vulnerable population and with an increased risk of Adverse Drug Events (ADE), particularly in fragile patients such as the elderly with complex medical conditions.Aim of this observational study was to describe and evaluate ADE in patients with polypharmacy by a digital health service that prevents Drug-Drug Interactions (DDI) using the social security number (SSN). **METHODS:** A cohort of 369 patients was identified through a closed loop, fully automated system that records and updates all the drugs taken during therapy cycle/s by specifically designed software interfaces loaded on Information and Communication Technology programs of the network.The tool was designed to support General Physicians in clinical decisions, providing them information about prescribed drugs/over the counter (OTC)/herbs, detailing dosage, comorbidity, number of packages and pills per package, prescription/purchase date. **RESULTS:** About 30% of patients shown 1 comorbidity and 11.8% 2 or more. Cardiovascular diseases (22.7%) represented the most frequent comorbidity, followed by musculoskeletal pathology (13.6%), diabetes (8.6%), cancer (5.1%), and depression (4.8%).The Charlson Comorbidity Index was 0 in 65.2%, 1 in 25.7%, 2 in 7.0% and 3 to 4 in 2.1%. A total of 67 patients (mean age 72 years; 52.2% women) had at least 1 DDI. About 50% (N = 33) had up to 2 DDIs, 25% from 3 to 7 DDIs and 25% ≥8 (from 9–74 DDIs per person). A total of 501 DDIs were identified: the severity was low in 35.5%, moderate in 59.7% and high in 4.8%. The top 10 drugs involved in DDI were: acetylsalicylic acid (ASA), hydrochlorothiazide, ibuprofen, diclofenac, digoxin, nebivolol, pantoprazole, ramipril, furosemide and nimesulide. **CONCLUSIONS:** ICT technologies are useful to timely identify DDIs of clinical relevance and the drugs most frequently involved.

PIH2
MODELING TO PREDICT SEVERE MATERNAL MORBIDITY BASED ON 33993 DELIVERIES OF REGISTERED STUDY IN CHINA

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OBJECTIVES: To set a model to predict the Severe Maternal Morbidity (SMM) and specify the risk factors based on a registered study in Sichuan province, China. **METHODS:** Overall 33993 deliveries of 8 hospitals in Sichuan province of China were consecutively collected between January 1, 2009, and December 31, 2010 in our database. The forward and backward stepwise regression methods were adapted respectively to screen independent risk factors of SMM, and a logistic model was set to predict the SMM by STATA 12.0. The areas under receiver operator characteristic (ROC) curve and agreement rate were used to evaluate the prediction model. **RESULTS:** Three kinds of unexpected surgeries, transfusion, hysterectomy, ICU care, Multiple Organ Dysfunction Syndrome (MODS) were chosen as the outcomes of SMM by literature review and expert consensus. The rate of SMM was 2.30% in 33993 deliveries. All specified and substantially significant risk factors were divided in four aspects. Social characteristics included the hometown location of pregnant women. Pre-delivery characteristics were gestational weeks, multiparity, abnormal pregnancy history, PPH history and smoking. The coexisted diseases and complications of pregnancy were gestational hypertension, preeclampsia and eclampsia, other gestational hypertension diseases, placenta previa, placenta increta, hematological disease, cardiac disease and gynecological diseases. The delivery characteristics contained styles of onset labor, midwifery, episiotomy, macrosomia, fetal death, premature rupture of membrane, uterotonic treatment. The areas under ROC curve and agreement rate were 0.87 and 98.05% respectively. **CONCLUSIONS:** SMM can reflect the severe degree of maternal outcomes indirectly, but also illustrate potential maternal health in a country or area by providing information to influence the delivery of health services and health policy. Our model specified dozens of risk factors and had considerably higher value of ROC area and agreement rate. We will perform the prospective research to predict and prevent the SMM in future.

PIH3
THE EFFICACY OF OXIMES IN ACUTE ORGANOPHOSPHORUS POISONING; AN UPDATED SYSTEMATIC REVIEW AND META-ANALYSIS

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ABSTRACT OBJECTIVES: The present study is a meta-analysis of clinical studies conducted to evaluate the efficacy of oximes in the treatment of organophosphorus (OP) intoxicated patients. **METHODS:** PubMed, Scopus, Google Scholar, and clinicaltials.gov were searched for studies investigated the effects of oximes in the treatment of OP poisoning. Mortality, intermediate syndrome, intensive care unit (ICU) admission rate, and intubation rate were the key outcomes of interest. Data were searched in the time period of 1966 through December 2013. **RESULTS:** Ten studies (nine clinical trials and one historical cohort) that met our criteria were included in the analysis. Pooling of data showed that relative risk (RR) of need for intubation in OP poisoning for eight included trials comparing oximes to placebo was 1.27 with 95% CI= 0.73 to 2.23 (P= 0.4). RR of only one observational study was 1.57 (95% CI= 0.79 to 3.2, P>0.05). The summary of RR for mortality rate in 9 studies was 0.38 (95% CI= 0.65 to 2.97, P= 0.41) and for one observational study was 1.33 (95% CI= 0.54 to 3.29, P>0.05). The RR for ICU admission rate in OP poisoning for three trials comparing oximes to placebo was2.12 with 95% CI= 0.89 to 5.03 (P= 0.09). For only one observational study, RR was 0.81 (95% CI= 0.49 to 1.25, P>0.05). For intermediate syndrome, while the RR of only trial comparing oximes with placebo was 1.89 (95% CI= 1.27 to 2.91, P<0.05) while for only one observational study, it was 1.43 (95% CI= 0.7 to 2.96, P>0.05). **CONCLUSIONS:** According to these data, oximes beneficence in OP poisoning is unclear and if administered, great caution must be exercised because of increase in ICU admission rate and incidence of intermediate syndrome. **KEYWORDS:** Organophosphorus, oxime, poisoning, meta-analysis.

PIH4
EFFECT OF VITAMIN E ON THE VAGINAL ATROPHY OF POSTMENOPAUSAL WOMEN

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OBJECTIVES: Vaginal atrophy is a silent epidemic that affects up to 50%-60% of postmenopausal women. Local,low-dose estrogen preparations are considered first-line pharmacologic treatment. For women concerned about hormone use a number of over-the-counter (OTC) vaginal moisturizer and lubricant products are considered first-line nonhormonal treatments. It has been reported that vitamin E vaginal gel improved the symptoms of volvovaginal atrophy However, oral vitamin E has never been well tested in a randomized clinical trial for efficacy against vaginal atrophy. Therefore the objective of this study is to assess the effect of vitamin E on the vaginal maturation index (VMI) of post menopausal women. **METHODS:** Participants in this placebo-controlled randomized cross over trial were 60 menopausal women who 4-12 months passed from their menopause. After randomization the women were given medication blister pack cards that contained an 8-week supply of study medication (400IU of vitamin E or placebo daily). Following 1-week no treatment , baseline period, the first group received one vitamin E soft gel daily (400IU dl-Alpha-tocopheryl acetate) while the second group received placebo for four weeks. In order to eliminate the carry over effect of cross over trial, one week washout was considered. Then the medication was reversed for each group and the study was continuing for another four weeks. Vaginal maturation index of the women before any intervention and after the first and second stage of treatment was evaluated. **RESULTS:** The study groups were homogeneous regarding age, BMI, time since menopause, educational and job status. No statistically significant differences were observed in the percentage of superficial, intermediate and parabasal cells within the groups at baseline and after the first and second stage of treatment. **CONCLUSIONS:** Based on our trial treatment with vitamin E for 4 weeks has no effect on the maturation of the vaginal epithelium in postmenopausal women.

PIH5
EFFICACY OF ATROPINE ALONE AND WITH GLYCOPYRROLATE COMBINATION IN ORGANOPHOSPHATE POISONING

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